

REMARKS

This is in response to the Office Action dated September 28, 2005. In that Office Action, the Examiner rejected all of pending Claims 1-20 as being anticipated by U.S. Pat. No. 5,485,037 to Marrs (hereinafter "MARRS").

1. **Independent Claim 1 is Not Anticipated by MARRS**

With regard to the rejection of Claim 1, the Examiner argues that MARRS discloses a semiconductor package having all of the features recited in Claim 1. More particularly, the Examiner states that the feature of "at least one first ground lead attached to the top surface of the heat sink between the semiconductor die and the peripheral edge of the heat sink" is disclosed in Figure 1A of MARRS and labeled with the reference number 102. Additionally, the Examiner states that the feature of "at least one second ground lead attached to the top surface of the heat sink and protruding beyond the peripheral edge thereof" is likewise illustrated in Figure 1A of MARRS and labeled with the reference number 102 on the opposing side.

Applicant respectfully submits that this interpretation of MARRS is erroneous. The MARRS device does not have a first ground lead which is attached to a heat sink "between the semiconductor die and the peripheral edge of the heat sink" as is recited in Claim 1. Even assuming, *arguendo*, that the package lead 102 of MARRS is generally analogous to the first ground lead of Applicant's invention, each such package lead 102 in MARRS extends from the semiconductor die 106 and beyond the peripheral edge of the heat sink 101, not between the semiconductor die 106 and the peripheral edge of the heat sink 101 as recited in Claim 1. Furthermore, the structural element which the Examiner considers to be a second ground lead is the same as what the Examiner considers to be the first ground lead, i.e., the package lead 102, as MARRS describes the semiconductor package in terms of the package lead 102 *only*. Applicant respectfully submits that the Examiner's reliance upon the package leads 102 of MARRS to satisfy both the first and second ground lead features of Claim 1 is misplaced since the package leads 102, though each arguably protruding beyond the peripheral edge of the heat sink 101, clearly do not terminate inboard of the peripheral edge of the heat sink as do the first ground leads of Applicant's invention.

Thus, Applicant respectfully submits that independent Claim 1 in its original form is not anticipated by MARRS and is in condition for allowance, as are Claims 2-14 as being dependent upon an allowable base claim.

2. **Amended Independent Claim 15 is Not Anticipated by MARRS**

Turning now to the rejection of independent Claim 15, the Examiner states that MARRS teaches “at least one first ground lead attached to the top surface of the heat sink in spaced relation to the semiconductor die... [and] at least one second ground lead attached to the top surface of the heat sink in spaced relation to the first ground lead.” As in the rejection of Claim 1, the Examiner argues that the first ground lead corresponds to package lead 102 of Figure 1A, and that the second ground lead corresponds to the package lead 102 on the opposing side as illustrated in Figure 1A. The Examiner further argues that MARRS teaches “a package body at least partially encapsulating the heat sink, the semiconductor die, the first and second ground leads, and the ground wires such that at least portion of the second ground lead is exposed in the package body”, the package body being illustrated in Figure 1A of MARRS and labeled with the reference number 110.

As amended, independent Claim 15 describes the package body as at least partially encapsulating the heat sink, the semiconductor die, the first and second ground leads, and the ground wires such that at least a portion of the second ground lead is exposed in the package body “and no portion of the first ground lead is exposed in the package body.” Thus, only the second ground lead, and not the first ground lead, is exposed in the package body.

In the rejection of Claim 15, as in the rejection of Claim 1, the structural element which the Examiner considers to be a second ground lead is the same as what the Examiner considers to be the first ground lead, i.e., the package lead 102, as MARRS describes the semiconductor package in terms of the package lead 102 *only*. Applicant respectfully submits that the clear teaching of MARRS is that all of package leads 102 are exposed in the package 110. Thus, it follows that MARRS is devoid of any teaching or suggestion regarding any first ground lead that is completely covered by the package 110. Thus, Applicant respectfully submits that amended independent Claim 15 is not anticipated by

Application No.: 10/766,046
Response to Office Action of September 28, 2005
Attorney Docket: AMKOR-099A

MARRS and is in condition for allowance, as are Claims 16-20 as being dependent upon an allowable base claim.

3. **Conclusion**

On the basis of the foregoing, Applicant respectfully submits that stated grounds of rejection have been overcome, and that Claims 1-20 of the present application are now in condition for allowance. An early Notice of Allowance is therefore respectfully requested.

If any additional fee is required, please charge Deposit Account Number 19-4330.

Respectfully submitted,

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By:



Customer No.: 007663

Mark B. Garred
Registration No. 34,823
STETINA BRUNDA GARRED & BRUCKER
75 Enterprise, Suite 250
Aliso Viejo, California 92656
Telephone: (949) 855-1246
Fax: (949) 855-6371